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# **Andrews on the social intelligence hypothesis**

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In *Do Apes Read Minds?* Kristin Andrews criticizes the standard folk psychology (SFP) and investigates a possibility of a pluralistic folk psychology (Andrews 2012). According to her, SFP is mistaken because it overemphasizes the importance of propositional attitudes; however, in order to predict or explain others' behavior, not only beliefs and desires, but also factors such as emotions, moods, personality traits, stereotypes, and situations must be taken into account. In this regard, Andrews aims not at reading minds, but at reading people holistically. The aim of my commentary is to investigate implications of her project. In particular, I shall examine Andrews's view on the social intelligence hypothesis. According to this hypothesis, "human cognitive ability evolved as a result of our ancestors' complex social environment rather than due to pressures of the physical environment" (Andrews 2012, 19). Andrews proposes her version of the hypothesis and argues that human beings developed the moral sense or understanding prior to the ability of attributing propositional attitudes. In this commentary, I shall compare and contrast Andrews's view with Nicholas Humphrey's and Alison Jolly's. According to Andrews, Humphrey advocates the principles of SFP; however, Jolly does not. For this reason, Andrews criticizes Humphrey and regards her version as an extension of Jolly's. But her view has a problem, because she does not differentiate between conventional and moral norms. In order to improve her view, she needs to consider the distinction between conventional and moral norms.

## **Humphrey's and Jolly's earlier versions**

In discussing earlier versions of the social intelligence hypothesis, let me begin with Humphrey's version. Humphrey defines intelligence as follows: "An animal displays intelligence when he modifies his behavior on the basis of valid inference from

evidence.’ The word ‘valid’ is meant to imply only that the inference is logically sound.” According to him, this definition includes “everything from simple associative learning to syllogistic reasoning” (Humphrey 1976, 304). Humphrey further differentiates between the low-level and the high-level intelligence. On the low-level intelligence, an animal can infer that something will happen because similar things happened in similar circumstances in the past. By contrast, on the high-level intelligence, an animal can infer that something will happen because of a novel conjunction of events. In Humphrey’s view, the low-level intelligence is elementary. However, the high-level intelligence is more special, because it is a sign of creativity that is characteristic of higher primates. Thus, he calls the high-level intelligence creative intellect (Humphrey 1976, 304).

Humphrey tries to answer the question of how higher primates could obtain creative intellect. In his view, most practical problems that higher primates encounter for survival can be solved by learning, which does not require creative intellect. Rather, higher primates had to develop creative intellect, because of their social or strategic interactions. Humphrey argues as follows:

Like chess, a social interaction is typically a transaction between social partners. One animal may, for instance, wish by his own behaviour to change the behaviour of another; but since the second animal is himself reactive and intelligent the interaction soon becomes a two-way argument where each “player” must be ready to change his tactics—and maybe his goals—as the game proceeds. Thus, over and above the cognitive skills which are required merely to perceive the current state of play (and they may be considerable), the social gamesman, like the chess player, must be capable of a special sort of *forward planning*. Given that each move in the game may call forth several alternative responses from the other player this forward planning will take the form of a decision tree, having its root in the current situation and growing branches corresponding to the moves considered in looking ahead at different possibilities. It asks for a level of intelligence which is, I submit, unparalleled in any other sphere of living. (Humphrey 1976, 309; italics added)

According to Humphrey, the reason higher primates developed creative intellect is that they had to do forward planning. This point is important in thinking about Andrews’s criticism of Humphrey. Although the above passage does not explicitly refer

to terms such as beliefs, desires, and propositional attitudes, Humphrey elsewhere argues that a social animal “must develop a fitting set of concepts and a fitting logic for dealing with a unique and uniquely elusive portion of reality” (Humphrey 1980, 59). These concepts and logic are used for attributing reasons, feelings, or desires to other agents. Thus, Andrews regards Humphrey as advocating SFP. In her view, Humphrey argues that to do forward planning is to make a prediction about others’ behavior, and in order to make an accurate prediction, it is necessary to attribute propositional attitudes to them (Andrews 2012, 216–17). But as mentioned above, Andrews is critical of SFP, and thus rejects Humphrey’s view. Instead of Humphrey’s version, Andrews regards her version as an extension of Jolly’s. Thus I shall discuss Jolly’s view.

Although Jolly is regarded as someone who proposed the social intelligence hypothesis, Jolly’s view differs from Humphrey’s. As mentioned above, Humphrey differentiates between learning and creative intellect, and emphasizes the importance of social or strategic interactions in the development of creative intellect. But Jolly stresses the importance of social learning. Although “the monkey-level intelligence” is regarded as “an ability to solve problems with objects, under controlled laboratory conditions,” Jolly extends the definition of intelligence to include social learning (Jolly 1966, 504). In her opinion, using intelligence socially is important for all social primates. Jolly argues: “In summary, the social use of intelligence is of crucial importance to all social primates. As the young develop, they depend on the troop for protection and for instruction in their role in life. Since their dependence on the troop both demands social learning and makes it possible, social integration and intelligence probably evolved together, reinforcing each other in an ever-increasing spiral” (Jolly 1966, 504). In contrast to Humphrey, Jolly does not seem to advocate the principles of SFP. This is why Andrews accepts Jolly’s view and tries to develop it.

### **Andrews’s new version**

I have thus far reviewed Humphrey’s and Jolly’s earlier versions of the social intelligence hypothesis. Andrews proposes a different version of it. According to her, human beings developed the moral sense before obtaining the ability of attributing

propositional attitudes and a theory of mind.

As described above, Andrews is critical of the idea that we must attribute beliefs and desires to agents in order to predict their behavior. But this does not imply that we do not need the ability of attributing beliefs and desires to agents. We sometimes need it, particularly, in explaining anomalous behaviors. In so doing, we cannot rely on factors such as traits and stereotypes. Thus, we have to explain anomalous behaviors in terms of beliefs and desires (Andrews 2009, 437–38; Andrews 2012, 220–21).

According to Andrews, anomalous behaviors are deviations from normal behaviors. In other words, in order to say that a behavior is a deviation, there must be something normal. Andrews claims that “[t]he sensitivity to behavior that is bizarre or otherwise out of the ordinary makes sense only against a background expectation about normal behavior. What this means is that our ancestors had an understanding of something like norms before they had a theory of mind” (Andrews 2012, 222). If we do not follow these norms, our community will punish us. In some extreme cases, we may be injured or even killed. In Andrews’s opinion, following social norms and punishing transgressors are seen not only in the human society, but also in the animal society. This suggests that “[t]he norms need not be declaratively represented; the rules may take the form of some implicit knowledge *how* rather than propositional knowledge *that*” (Andrews 2012, 224; *italics in the original*). This is why Andrews argues that human beings developed the moral sense or understanding prior to the ability of attributing propositional attitudes.

Andrews makes a good point. But at the same time, I have a concern. Andrews seems to identify the moral sense or understanding and social norms. This can be seen from the fact that she interchangeably uses these terms; however, she needs to differentiate between the two. Social norms are not always equal to moral norms, because social norms sometimes include conventional norms, particularly, in the human society. True, it is difficult to draw a fast and hard line between conventional and moral norms. In this regard, the difference between the two can be seen as a matter of degree. Nevertheless, conventional transgressions are not necessarily regarded as morally wrong in the human society. The reason Andrews identifies the moral sense or understanding and social norms would be twofold. First, she focuses on primatological studies. Second, she emphasizes the importance of social learning and cultural traditions. These reasons are

not independent of each other, but are interrelated. We are not sure whether monkeys have the sense of morality, as do most human beings. We do not know whether monkeys regard killing an innocent as *morally* wrong. As a result of this, Andrews disregards the difference between conventional and moral norms, and thus identifies the moral sense or understanding and social norms. If Andrews exclusively focuses on animals, the difference between the two may be disregarded. But her project is to criticize SFP in continuation between other animals, human infants, and human adults. Certainly, she might want to argue that what human beings call morality is just a convention. If so, cultural relativists gladly welcome her. If she wants to avoid such a consequence, she needs to provide an argument. For this reason, Andrews's view has a gap to be filled.

## Conclusion

I have thus far discussed Andrews's version of the social intelligence hypothesis, while reviewing Humphrey's and Jolly's earlier versions. By arguing that human beings developed the moral sense before the ability to attribute propositional attitudes to agents, Andrews revises the earlier versions. This is good. But her view still has a problem, because she does not distinguish between conventional and moral norms. If she clarifies the difference between the two, her view would be much better. I hope that my commentary helps Andrews to improve her view.

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